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[54] **DISPLAY STAND**
10 Claims, 7 Drawing Figs.

[52] **U.S. Cl.**..... **211/177,**
206/45.31

[51] **Int. Cl.**..... **A47f 5/10**

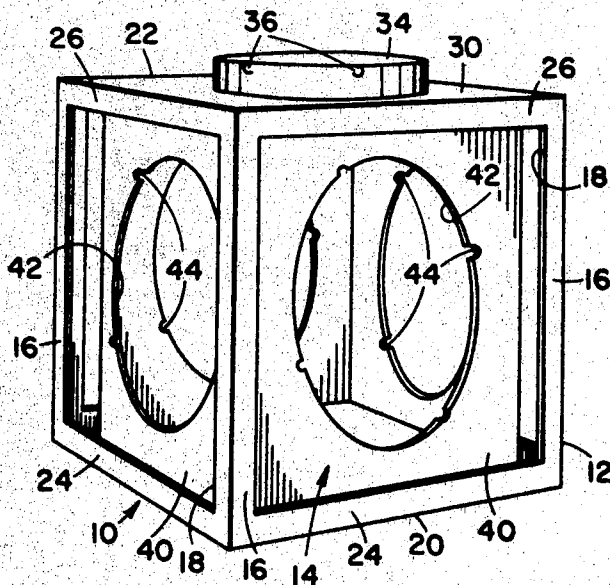
[50] **Field of Search**..... **312/111,**
198; 211/41, 72, 177; 206/45.31, 45.14

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ABSTRACT: A boxlike display stand or unit comprising an outer shell and an inner casing mounted within said shell. The shell is provided with top and bottom end walls having bosses extending outwardly therefrom, respectively, and support members extending between said top and bottom end walls defining openings or ports in said shell. The inner casing comprises vertical walls having apertures therein adapted to receive the projecting bosses of adjacent units whereby a plurality of such units may be joined in a display or to receive articles for display.



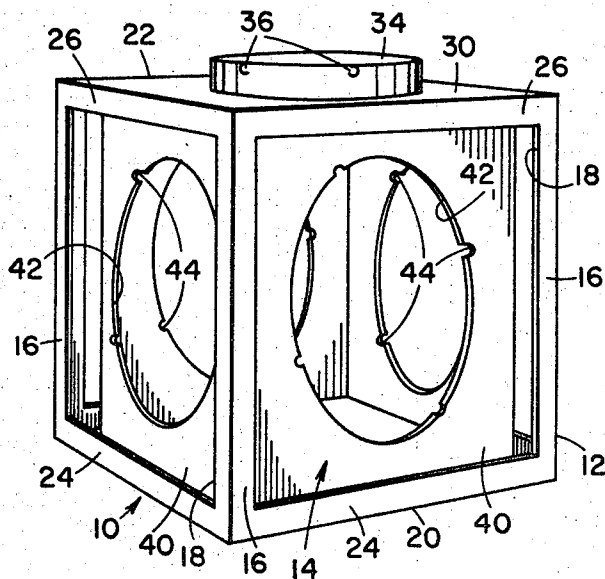


FIG. 1

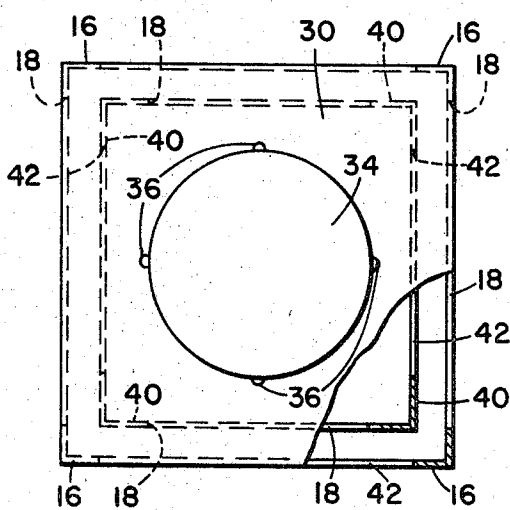


FIG. 2

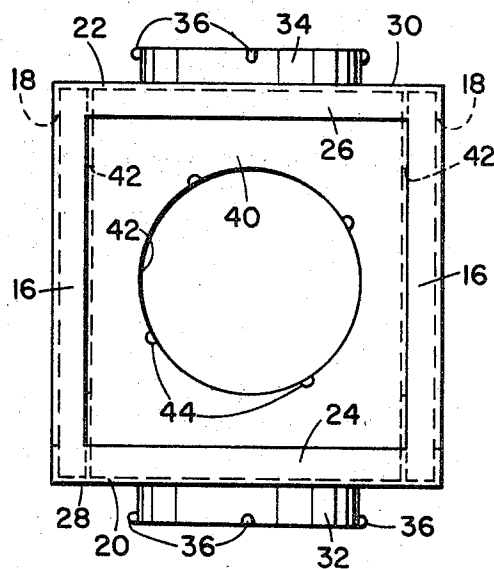


FIG. 3

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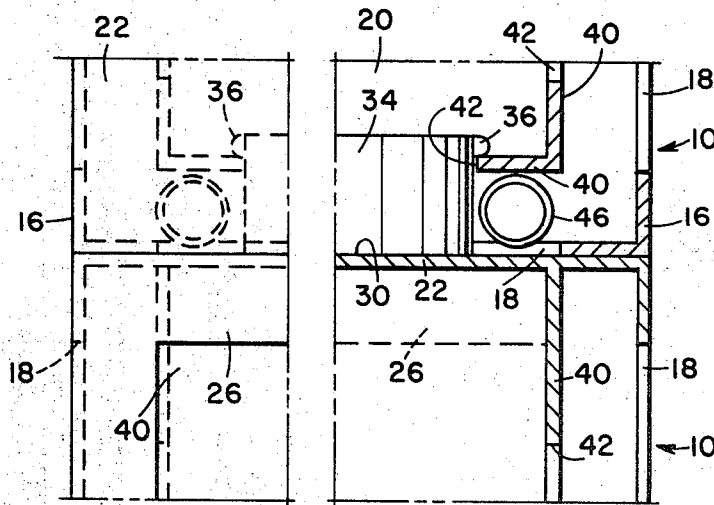


FIG. 4

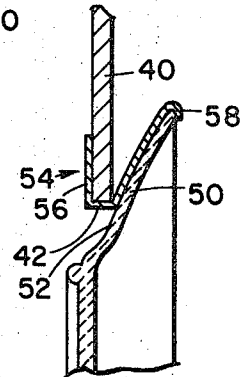


FIG. 5

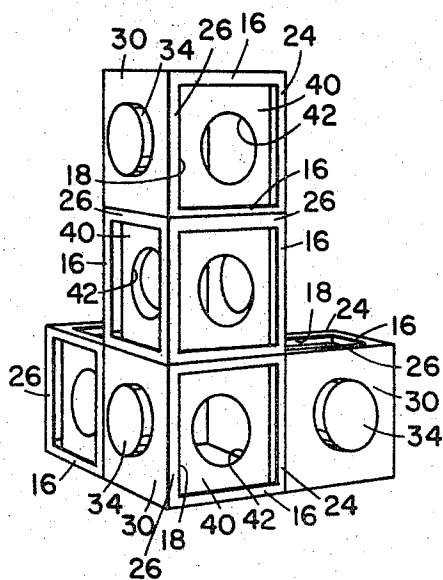


FIG. 6

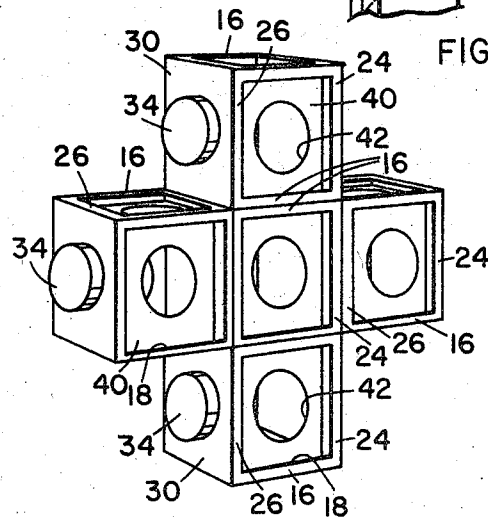


FIG. 7

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DISPLAY STAND

SUMMARY OF THE INVENTION

The apparatus of the present invention provides a new and improved portable, lightweight display stand or unit which is simple and strong in construction, rugged and durable in use, and capable of a wide variety of uses. The display unit comprises an outer shell having upright support members extending between the top and bottom end walls of said shell and defining with the end walls, openings in said shell. An inner casing suitably rigidly mounted within the shell, comprises vertical walls having apertures therein. The outer surfaces of the top and bottom end walls are provided with outwardly projecting bosses which are adapted to be inserted in the apertures of the vertical casing walls of other display units to form modular arrangements of vertically and/or horizontally positioned units.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a perspective view of a display stand or unit constructed in accordance with the principles of this invention;

FIG. 2 is a top plan view, partially in section, of the display unit shown in FIG. 1;

FIG. 3 is a side elevational view of the display unit shown in FIG. 1;

FIG. 4 is a fragmentary view, partially in section, illustrating two display units joined together;

FIG. 5 is a fragmentary, sectional view illustrating the mounting of an article in a display unit;

FIG. 6 is a perspective view illustrating a plurality of display units positioned in one exemplary arrangement; and

FIG. 7 is a perspective view illustrating a plurality of display units positioned in another exemplary arrangement.

DESCRIPTION OF A PREFERRED EMBODIMENT

Referring to the drawings, it will be observed that a display stand or unit, comprehensively designated 10, constructed in accordance with the principles of this invention, comprises an outer, boxlike shell 12 and an inner boxlike casing 14 suitably rigidly secured within shell 12. The terms upper, lower, top, bottom, upwardly, downwardly and the like, as used hereinafter, are applied only for convenience of description with reference to the illustration of FIG. 1 and should not be taken as limiting the scope of this invention.

Outer shell 12 comprises four elongated upstanding angle support members 16 that extend between a bottom end wall 20 and a top end wall 22. The spaces between each pair of adjacent members 16 and the end walls define substantially square openings or ports 18 in the side of shell 12 and provide access to the interior of the shell. Bottom end wall 20 has a flange or rim 24, preferably integral with the wall 20 and the lower ends of members 16, projecting upwardly around the peripheral edge of said wall 20. Likewise, top end wall 22 has a flange or rim 26, preferably integral with the wall 22 and the upper ends of members 16, projecting downwardly around the peripheral edge of said wall 22. The bottom and top end walls have outer surfaces 28 and 30 with cylindrically shaped bosses 32 and 34, respectively, projecting outwardly therefrom. Each of the bosses is provided with a plurality of lugs 36 disposed about the periphery of the boss adjacent the free end thereof for a purpose hereinafter explained. It should be understood that only one of said outer surfaces may be provided with a boss or that the bosses may be completely eliminated, if desired.

Inner casing 14 comprises four vertical sidewalls 40, rigidly connected at their lower and upper ends, respectively, to the inner surfaces of bottom end wall 20 and top end wall 22 of shell 12 and being, at each end, spaced inwardly from the entire outer circumferential edge portion of the end walls 20 and 22, respectively. Each of said sidewalls 40 has a circular aperture 42 to provide access into the interior of casing 14. These apertures are also adapted to receive the bosses of other display units to form a modular design of vertically or horizon-

tally positioned units, or a combination of both. A plurality of grooves 44 is formed in each of the sidewalls 40 around the periphery of the aperture 42 to accommodate the corresponding lugs of bosses of other units.

In assembling two units together, the lugs 36 of a boss of one unit are aligned with the grooves 44 in an aperture 42 of a second unit and the boss is inserted into the aperture. The grooves 44 are intentionally offset, i.e. a pair of diametrically opposed grooves 44 do not lie in a true vertical or horizontal plane so that when the boss of one unit is mated with an aperture of a second unit, the outer surfaces of the units are askew relative to each other and the edges thereof do not lie in common planes. Rotation of one unit relative to the other after assembly will align the units and interlock them by means of the binding relationship of the lugs 36 acting on the inner surface of sidewall 40 (see FIG. 4). Thus, a single display unit may be utilized or a plurality of units may be abuttingly positioned in any desired or convenient arrangement as illustrated in FIGS. 6 and 7. Although four lugs on each boss and four grooves in each wall 40 are conveniently employed for most purposes, it will be understood that any necessary or desired number may be employed and that they may be arranged in any suitable pattern or, when desired, may be omitted.

Referring to FIG. 4, it will be seen that a pair of display units 10 are disposed in a stacked or coupled relationship whereby the outer surfaces of the angle members 16 and the outer surface 30 of wall 22 bear against each other in a flush fit. The boss 34 of one unit is shown inserted in an aperture 42 of a sidewall 40 of a second unit with the lugs 36 of the boss bearing snugly against the inner surface of said wall 40. The space between wall 22 and interior wall 40 can, as shown, be utilized to accommodate a circular lighting fixture 46 such as a fluorescent or neon tube, suitably connected to an electrical power source (not shown), for providing illumination of various colors in order to further enhance the attractiveness of the display.

Although the display unit of this invention has general utility in exhibiting a variety of products, it is particularly useful in displaying chinaware or other products having circular shapes. For example, as shown in FIG. 5, a dish 50 having an outer, dish surface 52 may be placed in an aperture 42 and clamped in position by means of one or more resilient clamps 54. Each clamp has an angular portion 56, which engages the inner surface of the wall 40 and the inner portion of apertures 42, and terminates in a hook portion 58, that engages the peripheral edge or rim of said dish. It should be appreciated that the use of this invention is not restricted to displaying chinaware or articles having circular shapes, but may be used to exhibit a variety of articles of varied shape and form. For this purpose the apertures 42 may be of any desired size.

Although the bosses 32 and 34 and complementary apertures 42 of the display units are shown and above described as being circular, the principles of this invention envisage a variety of mating configurations such as oval, elliptical, rectangular or any other desired shape. Likewise, openings 18 may be of any desired shape and appropriate size within the purview of this invention. It should also be appreciated that any suitable coupling or interlocking means may be employed to attach the display units together and any suitable clamping or mounting means may be used in lieu of resilient clamp 54 for securing articles of manufacture to or within the display unit.

The units may be formed of a variety of materials or combination thereof, such as transparent or opaque plastics, glass, wood, or metal and maybe produced in any color or combination of colors desired. For most purposes, the units are preferably formed of suitable plastic and molded in sections. Thereafter the sections are joined together by any suitable cement.

The present invention provides a novel, simple display stand or unit which is lightweight, rugged and durable in use, and capable of withstanding much abuse and handling. By the provision of a casing disposed within the outer shell of the dis-

play unit, a double wall is provided for materially increasing the strength and rigidity of the display structure while effectively protecting the wares contained therein. Moreover, the double walls provide for increased flexibility of design applications. By the provision of projecting bosses and mating apertures in the units, a number of these units may be joined together to form various modular designs. With adequately strong units relatively large structures such as walls, room dividers, screens, etc. may be produced.

A preferred embodiment of this invention having been hereinabove described and illustrated, it is to be understood that numerous modifications thereof can be made without departing from the broad spirit and scope of this invention as defined by the appended claims. For instance, one or more of the vertical walls 40 may be spaced differently from the sides of the shell 12, suitable adjustment being made in the length of the bosses.

I claim:

1. A display unit comprising: an outer shell having spaced end walls; a plurality of laterally spaced support members extending between said spaced end walls; said laterally spaced support members and said end walls defining openings in said shell; each of said end walls having inner and outer surfaces; an inner casing mounted within said outer shell and having vertical sidewalls, each of said sidewalls extending between said spaced end walls of said outer shell and being, at each end, spaced inwardly from the entire outer circumferential edge portion of each of said end walls and said support members; said vertical sidewalls defining the periphery of said inner casing; and an aperture being provided in at least one of said side walls for providing access into the interior of said inner casing.

2. A display apparatus comprising: a plurality of display units as defined in claim 1 and interlocking means carried by said units securing adjacent units together.

3. A display unit as defined in claim 1 wherein said openings

in said shell are rectangular in shape.

4. A display unit as defined in claim 1 including a boss projecting outwardly from the outer surface of an end wall and adapted to be inserted in an aperture of an adjacent display unit.

5. A display unit comprising: an outer shell having spaced end walls; a plurality of laterally spaced support members extending between said spaced end walls; said laterally spaced support members and said end walls defining openings in said shell; each of said end walls having inner and outer surfaces; a boss projecting outwardly from each of said outer surfaces; an inner casing mounted within said outer shell and having vertical sidewalls extending between said spaced end walls of said outer shell; and an aperture provided in each of said side walls for providing access into the interior of said inner casing, each of said apertures being adapted to receive the boss of an adjacent display unit.

6. A display unit as defined in claim 5, wherein at least one of said bosses has a plurality of peripheral lugs.

7. A display unit as defined in claim 5 wherein at least one of said apertures has a plurality of grooves disposed about its periphery.

8. A display apparatus comprising: a plurality of display units as defined in claim 5 and interlocking means carried by said units securing adjacent units together.

9. A display apparatus as defined in claim 8 wherein each of said bosses has a plurality of peripheral lugs and each of said apertures has a plurality of peripheral grooves, and wherein said lugs of one of said units are interfitting with said grooves of an adjacent unit.

10. A display apparatus as defined in claim 8 wherein the outer surface of an end wall of one display unit and the vertical wall of the casing of an adjoining display unit define a space; and a lighting fixture is mounted within said space.

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